

MAIL STOP PCT

Attorney Docket No. 26491U
PCT/IL2003/000602

REMARKS

The above amendments have been made to conform the claims
to U.S. practice.

Respectfully submitted,

NATH & ASSOCIATES PLLC

Date: January 13, 2005

NATH & ASSOCIATES PLLC
1030 Fifteenth Street, N.W.
Sixth Floor
Washington, D.C. 20005-1503
GMN/GBK/ng: PrelimAmend

By: 

Gary M. Nath
Registration No. 26,965
Gregory B. Kang
Registration No. 45,273
Customer No. 20529

Attachment A

1-52. (canceled)

53. (new) A lithographic printing plate comprising: a substrate; and a single-coat self-organized multilayer infra-red imageable material.

54. (new) A lithographic printing plate according to claim 53, wherein the substrate is aluminum or polyester.

55. (new) A lithographic printing plate according to claim 54, wherein the substrate is aluminum that is grained and anodised, or the substrate is aluminum that has been treated with phosphoric acid.

56. (new) The lithographic printing plate of claim 54, wherein the substrate is aluminum that is pre-coated with a thermally insulating organic coating.

57. (new) The lithographic printing plate of claim 53, wherein the single coat self-organized multilayer contains at least one of: a poly dimethyl siloxane, a hydrophilic polymer, and an infrared absorbing dye or mixture of dyes.

58. (new) A lithographic printing plate of claim 53, wherein said single-coat self-organized multilayer infra-red imageable material comprises silicone polymers and non-silicone polymers.

59. (new) The lithographic printing plate of claim 58, wherein the non-silicone polymer is nitrocellulose or a mixture of nitrocelluloses.

60. (new) The lithographic printing plate of claim 58, where the non-silicone polymer is hydrophilic, or oleophilic.

61. (new) The lithographic printing plate of claim 58, which on selective imaging by infra-red ablation gives oleophilic image areas formed by the surface of the substrate, and oleophobic non-image areas formed from unablated silicone.

62. (new) The lithographic printing plate of claim 58, which on selective imaging by infra-red ablation gives oleophilic image areas formed by the non- silicone polymer-enriched surface directly attached to the substrate exposed by the image ablation process and oleophobic non-imaged areas formed from unablated silicone.

63. (new) The lithographic printing plate of claim 58, which on selective ablation by infra-red radiation gives hydrophilic ablated (background) areas formed by the surface of the substrate, and oleophilic non-ablated (image) areas formed from unablated silicone.

64. (new) The lithographic printing plate of claim 58, which on selective ablation by infra-red radiation gives hydrophilic ablated (background) areas formed by the non-silicone polymer-enriched surface directly attached to the substrate exposed by the ablation process and oleophilic non-ablated (image) areas formed from unablated silicone.

65. (new) A method of forming a lithographic printing plate, comprising providing a substrate, and applying a single-coat self-organizing infra-red imageable material onto said substrate.

66. (new) The method of claim 65, wherein the substrate is aluminum or the substrate is polyester.

67. (new) The method of claim 66, wherein the substrate is aluminum that is grained and anodised or the substrate is aluminum that has been treated with phosphoric acid.

68. (new) The method of claim 65, wherein the substrate is aluminum and the method additionally comprises the step of pre-coating the aluminum with a thermally insulating organic coating.

69. (new) The method of claim 65, wherein the single coat self-organizing contains at least one of: a poly dimethyl siloxane, a hydrophilic polymer, and an infrared absorbing dye or mixture of dyes.

70. (new) The method of claim 65, wherein said single-coat self-organizing infra- red imageable material comprises silicone polymers and non-silicone polymers.

71. (new) The method of claim 70, wherein the non-silicone polymer is nitrocellulose or a mixture of nitrocelluloses.

72. (new) The method of claim 70, where the non-silicone polymer is hydrophilic or oleophilic.

73. (new) The method of claim 65, wherein the self-organizing infra-red material is deposited from a mixture of at least two volatile organic solvents.

74. (new) The method of claim 73, wherein said single coat self-organizing material additionally contains a poly dimethyl siloxane, said poly dimethyl siloxane soluble in at least one of said mixture solvents.

75. (new) The method of claim 74, wherein the non-silicone polymer is soluble in at least one of said mixture solvents.

76. (new) The method of claim 74, additionally comprising the step of diluting the solvent mixture in order to permit all of the ingredients to remain in solution for at least 8 hours.

77. (new) The method of claim 65, wherein the single coat self-organizing material contains a poly dimethyl siloxane and an infra-red absorbing dye or mixture of dyes that are chosen so that they do not inhibit the curing of the poly dimethyl siloxane.

78. (new) The method of claim 65, additionally comprising the step of heating said applied self-organizing infra-red imageable material, wherein the material organizes itself into an infinite number of horizontal layers constituting a self-organized system.

79. (new) The method of claim 70, additionally comprising the step of heating said applied self-organizing infra-red imageable material, wherein the material organizes itself into an infinite number of horizontal layers constituting a self-organized system having a mixture rich in poly methyl siloxane on its surface and a mixture rich in non-silicone polymer in proximity to the substrate surface.